

## Claims

1. A nucleic acid containing a nucleotide sequence encoding a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, or a biologically active derivative thereof, said polypeptide or biologically active derivative thereof being a target for herbicidal compounds in plants.
2. The nucleic acid according to claim 1, wherein said nucleotide sequence is selected from the group consisting of SEQ ID No. 1 and SEQ ID No. 2.
3. A vector containing the nucleic acid according to claim 1 or 2.
4. A host organism containing the nucleic acid according to claim 1 or 2 or the vector according to claim 3.
5. A transgenic plant containing the nucleic acid according to claim 1 or 2 or the vector according to claim 3.
6. A polypeptide having an amino acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, or a biologically active derivative thereof, said polypeptide or biologically active derivative thereof being a target for herbicidal compounds in plants.
7. A method for developing herbicidal compounds, comprising the steps of:
  - contacting a test system containing a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, or a biologically active derivative thereof, with a candidate compound to be assayed; and
  - measuring the herbicidal activity of said candidate compound.

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8. A herbicidal compound obtained by using the method according to claim 7.